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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/765,184	01/18/2001	Duane Joseph Buening	DP-300203	6840

7590 03/15/2002
MARGARET A. DOBROWITSKY
DELPHI TECHNOLOGIES, INC
Legal Staff Mail Code: 480-414-420
P.O. Box 5052
Troy, MI 48007-5052

EXAMINER

MOHANDESI, IRAJ A

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 03/15/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/765,184

Applicant(s)

BUENING ET AL.

Examiner

Iraj A Mohandesi

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Hayashi (US 5,274,322) in view of **Thomas (US 4,163,187)**.

Hauashi'322 discloses an alternating current generator comprising; a stator (16); and a rotor (18), the rotor comprising a plurality of pole pairs (column 5, line 54) wherein the first and second winding are three phase windings (10); the first and second windings are physically offset one relative to another (Fig. 6); wherein the first winding wound in one of and Y configuration (12, "121-122-123) and the second winding wound in the other one of the delta connection (10, 101"02" 103 "); a stator comprising ; a substantially annular portion; a plurality of teeth extending radially inwardly from the annular body portion; a plurality of slots defined between said teeth; at least two winding wound around said teeth and insert in to the slots (Fig. 6) ; the windings are three phase winding (column 3, line 41, 46)' the first and second winding are connected to a rectifier bridge

(11.Fig.1);the stator further comprising a plurality of teeth defining a plurality of slots;(Fig.6) ;the first and second winding are positionally shifted from each other an electrical angel of 30 degree (column 2,line 13-17);

With respect to claim 16. Having $p=3$ (p , number of phases) the equation $90/p$ will inherently result in a 30 degree angle.

Hauashi'322 teaches all limitations of the claim except the stator having a first winding wound in a full pitch pattern and a second winding wound in a short pitch pattern; the stator comprising $2Xn_xp$ slots .

Thomas'187 discloses alternator with dual winding comprising; a stator a first Winding wound in a full pitch pattern and a second winding wound in a short pitch pattern ((Fig. 5).

Therefore it would have been obvious to one having skill in the art at the time the Invention wads made to combine **Hauashi's** alternator with the stator taught by **Thomas'187** to generates a mutual inductance between the turns of first winding and second winding to increase the voltage of the following winding.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to select the number of slots equal to $2xnxp$ wherein the (p) is the number of phases per winding and (n) is the rotor pole pair, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re boesch*, 617 F 2d 272, 205 USPQ 215 CCPA).

Application/Control Number: 09/765,184
Art Unit: 2834

Page 4

2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Iraj Mohandesi whose telephone number is (703) 305-3242.

Any inquiry concerning general nature or relating to the status of this application should be directed to the group Receptionist whose telephone number is (703) 308-1782 .The Fax number for this Group is (703) 305-3431(32)


JOSEPH WAKS
PRIMARY EXAMINER

I,M

March 11, 2002